

### Abstract

The time required to process a subset of an array can be shortened. Table-formatted data is divided into information blocks each including a value list (VL) where the item values are arranged in order of item value number corresponding to the item value of each item and a pointer array (PV) where the pointer values each indicating an item value number are arranged in order of unique record number. A part of records is selected as a subset, and in response to the selection, an ordered set array including the record numbers of the subset is created. Each record number in the ordered set array indicates the position of one of the pointer values in the pointer array. The pointer values in the pointer array are arranged in the item value number array correspondingly to the positions where the record numbers are arrayed. With reference to the values in the item value number array, a second pointer array (PV2) where position elements are arranged and a second value list (VL2) where value elements are arranged are generated.